

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

ZHENG DAVID LOU

Serial No. Unknown

Filing Date: Concurrent Herewith

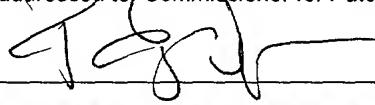
For : SOLENOID OPERATED  
HYDRAULIC CONTROL VALVE

Examiner: Gerald A. Michalsky

Group Art Unit No.: 3753

**CERTIFICATE OF EXPRESS MAIL**

I hereby certify that this correspondence is being deposited with the United States Postal Service via Express Mail Label No. ET 719 109 975 US in an envelope addressed to Commissioner for Patents, Washington, DC 20231 on February 21, 2002.

By 

**PRELIMINARY AMENDMENT**

Commissioner for Patents  
Washington, D.C. 20231

Dear Sirs:

Please amend the above-referenced divisional patent application which has been filed contemporaneously with this Preliminary Amendment as follows:

**IN THE CLAIMS:**

Please cancel Claims 2-4, 8, and 12-16. Please amend Claims 1, 5, 6, and 9 as follows (the changes in these Claims from the previous version to the rewritten version are shown in Appendix A, with strikethroughs for deleted matter and underlines for added matter):

1. (AMENDED) A solenoid-operated valve assembly for an automatic transmission of a motor vehicle, comprising:

a valve body having a control chamber, mutually spaced first, second and third ports communicating with the control chamber, the valve body further having a scaling orifice connecting an end volume and a source of low pressure;

a valve spool supported for movement along the control chamber, including a shank, a first land, adapted to open and close the first port and second port, and a second land located at an opposite end of the shank from the first land and adapted to open and close the third port;

a spring urging the valve spool to move along the control chamber; and

a solenoid assembly having an armature axially displaceable in response to an electric signal supplied to a coil, the armature urging the valve spool to move along the control chamber.

5. (AMENDED) The valve assembly of Claim 1 wherein the second land has a larger diameter than the diameter of the first land.

6. (AMENDED) The valve assembly of Claim 1 wherein the first port is adapted for connection to a source of supply pressure, the third port is adapted for connection to the source of low pressure, and the second port is adapted to produce control pressure achieved by balancing supply flow from the first port, vent flow to the third port, and control flow to and from a load.

9. (AMENDED) The valve assembly of Claim 7 wherein the first port is adapted for connection to a source of supply pressure, the third port is adapted for connection to the source of low pressure, and the second port is adapted to produce control pressure achieved by balancing supply flow from the first port, vent flow to the third port, and control flow to and from a load.

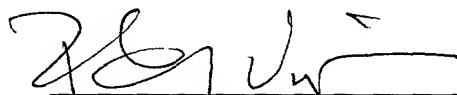
**REMARKS**

Upon entry of the present amendment, Claims 2-4, 8, and 12-16 have been cancelled, Claims 1, 5, 6 and 9 have been amended. Applicant respectfully submits that no new matter has been added. Applicant respectfully requests entry of the preliminary amendment.

**Rejections Under 35 U.S.C. §112**

Claims 7 and 9-11 have been rejected by the Examiner in Paper 6 and 11 of parent application for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. The amendments to Claims 1, 5, 6 and 9 are believed to overcome this rejection and place these claims in condition for allowance. Allowance therefore is respectfully requested.

Respectfully submitted,



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## APPENDIX A

1. A solenoid-operated valve assembly for an automatic transmission of a motor vehicle, comprising:

a valve body having a control chamber, mutually spaced first, second and third ports communicating with the control chamber, the valve body further having a scaling orifice connecting an end volume and a source of low pressure;

a valve spool supported for movement along the control chamber, including a shank, a first land, adapted to open and close the first port[, the first land having a feedback chamber and a feedback orifice connecting the feedback chamber] and second port, and a second land located at an opposite end of the shank from the first land and adapted to open and close the third port; [and]

a spring urging the valve spool to move along the control chamber; and

a solenoid assembly having an armature axially displaceable in response to an electric signal supplied to a coil, the armature urging the valve spool to move along the control chamber.

5. (AMENDED) The valve assembly of Claim 1 wherein the [first] second land has a larger diameter than the diameter of the [second] first land.

6. (AMENDED) The valve assembly of Claim 1 wherein the first port is adapted for connection to a source of supply pressure, the third port is adapted for connection to the [a] source of low pressure, and the second port is adapted to produce control pressure achieved by balancing supply flow from the first port, vent flow to the third port, and control flow to and from [the] a load.

9. (AMENDED) The valve assembly of Claim 7 wherein the first port is adapted for connection to a source of supply pressure, the third port is adapted for connection to [a] the source of low pressure, and the second port is adapted to produce control pressure achieved by balancing supply flow from the first port, vent flow to the third port, and control flow to and from [the] a load.